levels (sHLA-G: 6.46 ng/ml and HLA-G
ev: 3.62 ng/ml). Secreted HLA-G levels were highly increased in patients with serous ovarian carcinoma versus other subtypes (sHLA-G: 6.94 ng/ml vs 4.62 ng/ml, and HLA-G
ev: 4.20 ng/ml vs 1.45 ng/ml, respectively). Interestingly, sHLA-G level was increased in EOC patients with high CA-125 tumor marker levels (CA125 ≥ 35 U/ml: 7.20 ng/ml vs CA-125 < 35 U/ml: 3.51 ng/ml). Similarly, HLA-G
ev level was increased in EOC patients with high CA-125 tumor marker levels (CA125 ≥ 35 U/ml: 4.16 ng/ml vs CA-125 < 35 U/ml: 1.89 ng/ml).

Conclusions Our preliminary data established that both sHLA-G and HLA-G
ev may provide an interesting new opportunity as tumor markers to evaluate patients with suspected ovarian cancer. Further studies still needed to consolidate our finding and clearly establish secreted HLA-G as new biomarkers for monitoring the disease.

EP312/#486 COMPARISON OF HRD STATUS BEFORE AND AFTER NEOADJUVANT CHEMOTHERAPY IN PATIENTS WITH ADVANCED EPITHELIAL OVARIAN CANCER

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Objectives Neoadjuvant chemotherapy (NACT) has been regarded as a standard treatment for those advanced epithelial ovarian cancer patients with massively disseminated tumors. The homologous recombination deficiency (HRD) status has guiding significance for the therapeutic selection of poly (ADP-ribose) polymerase (PARP) inhibitors. However, platinum may be mutagenic as a DNA cross-linker. So, the HRD status may change. Therefore, we analyze some clinical data to detect the change in HRD status before and after platinum-based NACT.

Methods A total of 41 patients with advanced epithelial ovarian cancer for which biopsies were obtained before receiving NACT were enrolled. The BRCA mutation, HRD score, and HRD status of the paired samples of biopsy and surgery were tested by the AmoyDx® HRD-Focus panel.

Results HRD status was defined as HRD positive for tumors with BRCA1/2 mutation or HRD scores ≥41. Before NACT, 10 patients were BRCA mutation-positive and 22 were HRD positive. While 9 patients were BRCA mutation-positive, 21 were HRD positive and 1 was not detected after NACT. There were 3 paired samples changed in BRCA mutation, and 2 of them were BRCA mutation-positive changed into BRCA mutation-negative. The other pair showed the opposite change. Among 10 paired samples of HRD status changed, HRD positive to negative accounts for half.

Conclusions The HRD status of advanced epithelial ovarian cancer patients may be influenced by platinum-based chemotherapy. So, it should be detected by surgical sample after NACT.

EP313/#490 VALIDATION OF MUTATION ANALYSIS OF OVARIAN CANCER PREDISPOSITION GENES IN TUMOR TISSUE

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Objectives Almost 10% of ovarian cancer (OC) patients carry a somatic pathogenic variant (PV) in one of the ovarian cancer (OC) predisposition genes (e.g. BRCA1/2) and might respond to PARP inhibition. Without somatic testing these patients are denied effective treatment.

Methods To implement tumor testing of ovarian cancer predisposition genes the 523 gene panel (TSO500, Illumina) was validated in a cohort of 48 formalin-fixed paraffin-embedded archival samples with known mutation status. Blind data analysis was performed for mutational status using Franklin Genoox software (Franklin) and an in-house built Copy Number Variation (CNV) analysis. BRCA1 MLPA analysis was performed for all mutation negative samples.

Results The validation cohort consisted of ovarian (n=40), breast (n=6) and pancreas (n=2) samples of which 44 were known to contain a germline mutation and 3 a somatic
mutation. After blinded data analysis, a PV was detected in 35 cases (BRCA1/2, BRIP1, RAD51C) and a variant of unknown significance in 6 cases (BRCA1/2, BRIP1, RAD51D). Exon deletions in BRCA1 were detected in 5 cases. The known molecular defect was identified in 46/48 (96%). Two CNVs (4%) were missed, a tandem duplication including CHEK2 and loss of RAD51D.

Conclusions TSO500 mutation analysis can be reliably used to detect PVs in OC predisposition genes, however, CNV analysis remains challenging. Therefore, the tumor first workflow where the tumor test is performed first to guide treatment might not identify all carriers of a germline PV. However, with Dutch nationwide implementation, this universal workflow leads to genetic testing of a higher proportion of OC patients.

E-poster viewing: Palliative care

EP314/#868  CLINICAL CHARACTERISTICS AND OUTCOMES IN ELDERLY GYNECOLOGIC CANCELS PATIENTS WITHOUT SURGICAL TREATMENT

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Objectives Although surgery is the main treatment for gynecologic cancer, elderly patients are less likely to have surgical treatment than younger patients. This study aimed to investigate clinical characteristics and outcomes of elderly gynecologic cancer patients who did not receive surgical treatment.

Methods This retrospective study included patients aged 65 years and older who were diagnosed with invasive gynecologic cancers at a tertiary medical center in Korea. Patients with recurrent cancer, or incomplete records were excluded. Clinical data included age at diagnosis, comorbidity, stage, reason for not having surgery, nonsurgical treatments such as radiation or chemotherapy, and dates of last follow-up.

Results During the study period, 247 patients with gynecologic cancer were enrolled. The mean age of patients was 70.5 years. Ovarian, endometrial, and cervical cancer were 85, 60, and 102 patients, respectively. Among them, 127 (51.4%) patients underwent surgical treatment and 120 (48.6%) patients did not undergo any surgery. Cervical cancer (49.6%) was the most common in the non-surgery group, but ovarian cancer (43.7%) was the most common in the surgery group. In the non-surgical group, there were 51 (42.3%) patients who did not receive any treatment. The elderly patients in the non-surgery group were older ages (p<0.0001), more advanced stage (p=0.017), and shorter follow-up period (p=0.004) than those in the surgery group.

Conclusions Only half of the elderly patients who diagnosed with gynecologic cancers received an appropriate surgical treatment. Elderly gynecologic cancers patients without surgical treatment showed more aggressive disease and poorer prognosis than those with surgical treatment.

EP315/#711  PALLIATIVE CARE UTILIZATION AND GOALS OF CARE DISCUSSIONS DURING ADMISSION FOR MALIGNANT BOWEL OBSTRUCTION IN GYNECOLOGIC MALIGNANCIES

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Objectives Malignant bowel obstruction (MBO) represents a devastating sequela of gynecologic cancer. MBO patients experience high rates of symptom burden, re-admission, and mortality. Dedicated goals of care (GOC) discussions and specialty Palliative Care (PC) consultation may provide two crucial adjuncts when caring for MBO patients, for both symptom management and advanced care planning.

Methods A retrospective review was performed of patients with gynecologic MBO admitted to a single academic institution from 2016–2021. Palliative Care consultation, post-hospitalization disposition, and rates of GOC discussion were extracted from the electronic medical record (EMR).

Results 179 patients accounted for 269 MBO-related admissions over the study period. During the first MBO-related admission, GOC discussions were documented in (64/169) 37.9% of patients; about half (84/169; 50.3%) received PC consultation. 1 in 4 (25.4%) patients were discharged to hospice following first MBO admission. Considering any MBO-related admission, GOC conversations were documented in 90/169 (53.3%) of patients. Almost 1/3 of patients (29.4%) of patients opted to discontinue cancer-directed therapy during an MBO-related admission. Frequency of GOC discussion documentation increased with disease severity, and was higher for patients with carcinoma, ascites, complete bowel obstruction, leukocytosis, and/or hypoalbuminemia. PC consultation rates did not trend with disease severity.

Conclusions MBO-related admission may represent a sentinel event for patients with gynecologic cancers. Many patients are discharged to hospice or decide to discontinue disease-directed therapy following a single MBO-related admission. Rates of GOC discussion documentation and formal Palliative Care consultation remain low in this cohort, suggesting an opportunity to improve the delivery of goal-concordant care.

EP316/#1111  MALIGNANT BOWEL OBSTRUCTION PATHWAY TO IMPROVE SERIOUS ILLNESS CONVERSATION AND STANDARDIZE MANAGEMENT

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Objectives There is significant heterogeneity in the management of patients admitted with malignant bowel obstruction (MBO). MBO is a poor prognostic sign that warrants...